# Creation of the Rowing Toolbox – a Wiki-based Information Resource for Rowers

## E-Learning

Modern technologies have armed educators with an increased array of strategies and devices to assist them in the teaching process. This use of technology to assist with education is known as e-learning. As technology becomes increasingly prevalent in first-world society, so too are ‘digital natives’ – people that have grown up surrounded by technology and are able to use it comfortably and instinctively (Prensky, 2001). To these ‘natives’, the classic style of teaching can feel slow and outdated, creating the sense that the information is coming to them too slowly (Prensky, 2001). Ideally, e-learning utilises multiple avenues of technology to present information in a variety of ways to the students. Whilst it is important to remember that basic pedagogical concepts remain the same, technology presents the modern teacher with an array of new strategies that can be used to assist with the learning process. Another key advantage is the fact that ICT resources can often be accessed at any time, extending the potential learning frame beyond the classroom by allowing learners to work at their own pace and convenience (Krause, 2006).

## My Teaching Philosophy and E-Learning

The most core aspect of my teaching philosophy is that teaching must be tailored to each individual learner – it is simply not possible to achieve sufficient learning with one universal approach or lesson concept. It is widely published fact that students have different learning styles or areas of intelligence (Barry, 2004; Krause, 2006). These variations must be catered for in order to achieve an inclusive learning environment.

The raft of potential resources and strategies provided by technology is complements my teaching philosophy well. Due to the different learning styles, intelligences and aptitudes of each student, an increased number of resources and strategies can only be beneficial when trying to find the best way to individually tailor the learning situation. I also feel that ‘digital natives’ often feel more comfortable and natural whilst using ICT and digital technologies; thus wherever possible I strive to utilise e-learning methods in my teaching.

## Context of the Resource

Rowing is an extremely popular sport that is practiced in many countries throughout the world. As with many sports however, much of the information about technique, training, and other aspects is passed on from coach to athlete by word-of-mouth. Written information about rowing tends to be in the format of highly technical books aimed at elite-level coaches and athletes, or scarce and scattered information posted throughout the internet with little structure or verification. After 8 years of involvement with the sport, I am yet to discover a written resource (either on- or offline) that is both comprehensive and accessible to all levels of athletes and coaches.

Learning to row is a very complex matter however, with a huge amount of information to digest in the early stages as novices start on the steep learning curve (McArthur, 2005). Due to the nature of the human brain and how it processes and stores information, there is only so much advice or information a rower can store from each training session. The short-term memory can only hold a limited amount of information, and once the capacity is reached, older information is pushed out by new information (Krause, 2006). During my experience coaching novice rowers, I have noticed many of them are extremely keen to learn as much as possible, but reach the point of information saturation by the end of a 2-hour training session, in much the same way as students do in a classroom. However, I realised that the learning could be continued outside the daily training sessions if the athletes had access to a suitable resource. In addition to this, some athletes have different learning styles and do not respond well to aural coaching – just like different students in the classroom respond to different teaching and learning strategies (Australian Sports Commission, 2000; Barry, 2004; Krause, 2006). Common examples of teaching strategies in rowing include off-water demonstration; being coached whilst in the act of rowing; the use of drills; or comparison of the rower’s video footage with that of another rower (McArthur, 2005; Nolte, 2005). Coaches will employ a range of these (and others) in their work; however, there is little scope for a rower to conduct their own research into an aspect of the sport due to the lack of appropriate written content.

Learning can be divided into three major categories; cognitive learning, where the learning is done through mental processes; psychomotor learning, which is the process of learning associated with bodily movements; and affective learning, which is associated with personal and social aspects (Barry, 2004). Rowing has a heavy emphasis on psychomotor aspects, however affective and cognitive learning processes are also involved, and are important aspects of a rower’s development. The typical coaching process can address the psychomotor learning required; however the affective and cognitive learning is often left to the athlete’s responsibility, except in the case of an unusually dedicated coach. Although elite level rowers receive this level of coaching as they strive to obtain every possible advantage, these two aspects of learning are usually neglected in the case of the average grass-roots rower in a school or club situation (Australian Sports Commission, 2000).

With this in mind, I set out to create the Rowing Toolbox – an online interactive information resource that could be accessed by anyone with an interest in the sport, and contributed to by people of all levels of involvement with rowing. In its present fledgling stage, it has a strong bias towards educating novice or beginner rowers about the sport, as well as including some resources for relatively inexperienced coaches to draw on and use in their coaching. The minimum goal for this resource is to provide a useful information source aimed at novice rowers starting out at the UWA Boat Club, and maintained by the array of coaches that work with the novice squads. However, much of the information contained in the wiki can be applied across all levels of rowing and coaching, and it is my aim to develop it across the whole spectrum, to the point where anyone with an interest in rowing can find a rich variety of useful material, regardless of their level of experience or skill.

## Description

The resource has been created in the format of a wiki due to the spatial nature of the platform, rather than a chronological platform such as a blog. The ‘Home’ page represents the starting point of the wiki, providing access and a brief overview of each of the pages contained within. Navigation between the pages is simple; done by either clicking the links on the ‘Home’ page, or by using the sidebar that is present as users browse through the wiki. The many aspects of rowing-related information have been broken into major categories, each of which has been allocated to a page. These pages have then been divided into sub-headings where necessary. As the wiki grows with contributions, further sub-headings and pages will become necessary to preserve a clear structure. At present, there are not many intra-wiki links – aside from the page navigation, most of the links are to external sites – however as the pages grow and the resource becomes more complex, these intra-site links will become necessary to assist the user with finding information within the wiki.

In its present state, the wiki is able to be presented to the athletes as a stand-alone resource, for them to read and use in their own time, at their own pace. The nature of this wiki means that rowers could use it as a reference tool to seek in-depth explanations of concepts discussed in training, or to consult other users for more information if an aspect has not yet been included in the wiki.

Alternatively, a coach could use the wiki to work directly with their rowers in ways such as:

* using the information displayed in the wiki as the basis for a discussion session or explanation of concepts (using a projector or Smartboard-type arrangement),
* drawing on the multimedia collection to show aspects of rowing to the athletes in a visual session,
* posting workouts or training schedules for the upcoming weeks of training so that athletes can view what they will be doing in the near future.

In addition to being a learning resource for rowers, the wiki aims to also provide useful information for coaches to draw on and use to develop their coaching. In particular, the “Weights”, “Fitness” and “Training Drills” pages provide a useful variety of drills, schedules and weights programs that coaches can peruse, before ultimately choosing one that suits the current stage of development of their athletes. The wiki format will allow the pooling of knowledge between multiple coaches, and as the site expands beyond the small group I have initially consulted, a hugely varied collection of training tips and techniques will begin to form, hopefully providing each coach with an opportunity to learn something new.

Overall, the intended outcome of the wiki is to grant rowers and coaches access to fresh information from outside their immediate circle of knowledge, allowing them to shortcut the usual route of learning through years of experience. Rowers and coaches generally learn rowing knowledge by working directly with people of a higher experience level, such as:

* their coach (in the case of rowers)
* more experienced athletes (rowers and coaches)
* coaches with a higher level of experience (coaches)

This occurs over a period of many years, as they row or coach with different crews, clubs and coaches. However, by providing a collection point for the knowledge of a wide range of rowing-related personnel, users will be able to draw on that knowledge over a much shorter period of time - provided they have sufficient motivation to read it all.

As previously stated, e-learning is not a methodology, but rather the use of technology to assist in learning. This resource has not been designed with the intent that a complete beginner could use it to learn how to row without any further assistance. Instead, it has been created with the intention that it be used by rowers and coaches to assist their rowing development – in a sense, it is another ‘arrow in the quiver’ for people in the sport of rowing to draw on.

## Discussion of Issues and Potential Problems

Whilst creating this resource I identified several potential problems that may occur as it is used. The most serious potential issue I can foresee is likely to arise from coaches. Due to the competitive nature of the sport, many coaches keep their training programs and coaching techniques intensely private, feeling that it is valuable intellectual property and sharing it may give away some of their competitive advantage. If this occurs the growth of the wiki as a resource will become stunted, limiting its value as a resource. Similarly, if coaches with strong opinions on certain matters come to a disagreement, the open contribution style of a wiki may lead to problems – for example, if coaches delete or alter material simply because it conflicts with their opinions. The advantage of the wiki format is the ability to see what changes have been made, and by whom; I believe that this feature, combined with close monitoring and careful moderation of the site, will keep these problems under control. The issue of stunted growth due to lack of contribution can be overcome by actively pursuing coaches and rowers in other forums (such as at regattas) and requesting them to contribute, as well as spreading the word about the resource both online and in real life.

A potential problem I identified is that if the wiki becomes too large and contains too much information, people may lose motivation to use it. In its present state it is of an easily accessible size, particularly for novice rowers wanting to find out more information about their new sport. However if it undergoes excessive growth, the wiki has potential to create a situation of information overload, where the average user will be overwhelmed by the amount of information presented, and will lose the motivation to sort through the multitude of tips, workouts, drills and programs on hand in order to find the right one for them. I anticipate that this problem can be confronted by the use of smart site design – as the site expands and the amount of information grows, the creation of new sub-categories and pages will allow the user to continue to find what they need with relative ease. For example, once the number of workouts, programs, and training drills starts to grow, they could be subdivided into categories such as “Elite”, “Improving”, and “Novice”, allowing rowers and coaches to browse through resources aimed at an appropriate skill level. Indeed, the entire site could be divided into these sub-categories, or perhaps into sections such as “Coaches” and “Athletes”.

The effectiveness of the wiki has already undergone an initial assessment. As part of the creative process I created a generic username and password which was disseminated to a small sample of members from the club (a mixture of rowers and coaches) in order to test the resource and gain some constructive feedback – similar to a beta testing process. This was done when the basic structure of the wiki was complete and approximately 85% of my content had been posted already. Each user was able to navigate their way through the pages with success, and offer some useful feedback on how it could be augmented and improved. All feedback was positive, and when conversing with the users at training a high level of excitement and enthusiasm was shown for the resource. All of the beta testers felt that the wiki has the potential to rapidly expand to the point where it is a resource that can be used by many rowers. Both rowers and coaches alike expressed a strong desire to continue using it.

Another problem that could potentially face this resource is a lack of contributors due to the perceived amount of effort required – potential users with no previous wiki experience may be turned away from contributing by the misconception that they need to know how to write website material, which is not actually the case. As already discussed, a communal login was created to remove one of the obstacles that could be perceived as ‘time-consuming’ – although a wikispaces login can be created in a matter of minutes, potential users may be turned away by the perception that signing up to the site will be a lengthy process and not worthy of the effort. Although the communal login was helpful to use on a small scale with members of the UWA Boat Club for the beta testing, it would not be feasible to use widespread publication of the login, as this would expose the wiki to a lack of accountability with users and the potential for attacks and negative activity. The creation of a more detailed ‘how to post’ could potentially overcome a lack of contribution (caused by the perception of excessive effort level required) by demonstrating how quick and easy it is to begin posting on the wiki. In the beta testing phase of the wiki, only one of the contributors (a self-confessed ‘digital immigrant’) was initially unable to work out how to post content, however this was due to the fact that he had not read the help section on how to post in the wiki. This obstacle was rapidly overcome as soon as the ‘Edit’ button was pointed out, and he was then able to contribute valuable content to four of the pages on the wiki. Again, this situation could be prevented by the creation of a more obvious and substantial “how to post” section to provide assistance to those new to wikis – this requirement has been acknowledged and the creation has begun, although further work is needed.

## Evaluation and Potential Variations

Now that the resource has been completed to a basic stage, I intend to share it with the members of my novice women squad at UWA Boat Club and solicit their feedback on the site. In addition to this, I will engage in conversation with them at training to assess the extent of the knowledge that they have derived from the wiki. This will allow me to assess whether the wiki has achieved the intended outcomes, whilst simultaneously identifying areas requiring clarification, improvement, or expansion. It is not expected that they will instantly start rowing better as a result of reading the wiki, but given enough time and regular use of the resource they will hopefully develop more rapidly than they otherwise might have.

In addition to this I also plan to begin contacting a variety of coaches from different rowing clubs in WA and soliciting their contributions. If this is successful and the wiki begins to expand, I will start to publicise it more widely on a national and international scale – with the internet, the sky is the limit! Although I envisage the basic framework of the wiki as remaining fairly constant throughout any potential expansion, the amount of content within each page will grow until the resource becomes a large collection of useful rowing information.

If expansion beyond the UWA Boat Club is unsuccessful, the wiki is still likely to continue as an extremely useful resource on a small scale. Several of the beta testers expressed their thankfulness for the creation of the site, as it will assist them with distributing information to the new batch of novice rowers that join the club each year. If it does not generate interest beyond the scope of the UWA Boat Club, it will probably still be used as frequently a resource by our coaches and athletes. If the more experienced athletes and their coaches from the club are not interested in using or participating in the wiki, the response from the coaches of the novice squads has already been positive (and contribution has already begun) indicating that the minimum achievement of this wiki will be to provide a valuable resource to the men and women of the UWA Boat Club Novice Squads as they learn to row.

## References

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